

## WHAT IS CLAIMED IS:

1. A testing apparatus using a DNA microarray,  
comprising:

5 a reading unit configured to read a hybridization  
pattern in a DNA microarray containing a first DNA  
probe group which can be used to identify a subject and  
a second DNA probe group which can be used to test a  
specimen;

10 an identification unit configured to analyze a  
pattern corresponding to the first DNA probe group from  
the hybridization pattern read by said reading unit to  
identify the subject; and

15 a generation unit configured to analyze a pattern  
corresponding to the second DNA probe group from the  
hybridization pattern read by said reading unit to  
generate test information.

2. The apparatus according to claim 1, further  
comprising

20 a storage unit configured to store the subject  
and a past test result, and

a unit configured to read out, from said storage  
unit, the past test result of the subject identified by  
said identification unit.

25 3. The apparatus according to claim 1, wherein  
the DNA microarray has a first identification  
indicator which indicates a probe structure of the  
first DNA probe group,

said reading unit further comprises a unit configured to read the first identification indicator, and

said identification unit analyzes the  
5 hybridization pattern of the first DNA probe group read by said reading unit, on the basis of the structure of the first DNA probe group recognized based on the first identification indicator.

4. The apparatus according to claim 1, wherein  
10 the DNA microarray has a second identification indicator which indicates a probe structure of the second DNA probe group,

said reading unit further comprises a unit configured to read the second identification indicator,  
15 and

said generation unit analyzes the hybridization pattern of the second DNA probe group read by said reading unit, on the basis of the structure of the second DNA probe group recognized based on the second  
20 identification indicator.

5. The apparatus according to claim 1, wherein the DNA microarray has an identification indicator which specifies the DNA microarray itself, and specifies the subject on the basis of the identification indicator.

25 6. A testing method using a DNA microarray, comprising:

a reading step of reading a hybridization pattern

in a DNA microarray containing a first DNA probe group which can be used to identify a subject and a second DNA probe group which can be used to test a specimen;

an identification step of analyzing a pattern  
5 corresponding to the first DNA probe group from the hybridization pattern read in the reading step to identify the subject; and

a generation step of analyzing a pattern corresponding to the second DNA probe group from the  
10 hybridization pattern read in the reading step to generate test information.

7. The method according to claim 6, further comprising a step of reading out, from a storage unit configured to store the subject and a past test result,  
15 the past test result of the subject identified in the identification step.

8. The method according to claim 6, wherein the DNA microarray has a first identification indicator which indicates a probe structure of the  
20 first DNA probe group,

the reading step further comprises a step of reading the first identification indicator, and

in the identification step, the hybridization pattern of the first DNA probe group read in the  
25 reading step is analyzed on the basis of the structure of the first DNA probe group recognized based on the first identification indicator.

9. The method according to claim 6, wherein  
the DNA microarray has a second identification  
indicator which indicates a probe structure of the  
second DNA probe group,

5 the reading step further comprises a step of  
reading the second identification indicator, and  
in the generation step, the hybridization pattern  
of the second DNA probe group read in the reading step  
is analyzed on the basis of the structure of the second  
10 DNA probe group recognized based on the second  
identification indicator.

10. A testing apparatus using a DNA microarray,  
comprising:

a reading unit configured to read a hybridization  
15 pattern from a DNA microarray containing a first DNA  
probe group which can be used to identify a subject;

a first acquisition unit configured to analyze a  
pattern corresponding to the first DNA probe group from  
the hybridization pattern read by said reading unit to  
20 acquire identification information of the subject;

a second acquisition unit configured to read a  
medical information card held by a subject to acquire  
identification information of the subject recorded on  
the medical information card; and

25 a comparison unit configured to compare the  
pieces of identification information acquired by said  
first and second acquisition unit.

11. The apparatus according to claim 10, wherein  
the DNA microarray contains a second DNA probe  
group which can be used to test a specimen, and  
the apparatus further comprises a generation unit

5 configured to analyze a pattern corresponding to the  
second DNA probe group from the hybridization pattern  
read by said reading unit to generate test information.

12. The apparatus according to claim 11, further  
comprising a first recording unit configured to, when  
10 it is determined as a result of comparison by said  
comparison unit that the subject identified on the  
basis of the first DNA probe group coincides with that  
recorded on the medical information card, record the  
test information generated by said generation unit on  
15 the medical information card.

13. The apparatus according to claim 11, further  
comprising an output unit configured to output a  
warning when it is determined as a result of comparison  
by said comparison unit that the subject identified on  
20 the basis of the first DNA probe group does not  
coincide with that recorded on the medical information  
card.

14. The apparatus according to claim 12, further  
comprising a second recording unit configured to, when  
25 the identification information of the subject is not  
recorded on the medical information card, record the  
identification information acquired by said first

acquisition unit on the medical information card.

15. A testing method using a DNA microarray,  
comprising:

5 a reading step of reading a hybridization pattern  
from a DNA microarray containing a first DNA probe  
group which can be used to identify a subject;

a first acquisition step of analyzing a pattern  
corresponding to the first DNA probe group from the  
hybridization pattern read in the reading step to  
10 acquire identification information of the subject;

a second acquisition step of acquiring  
identification information of a subject recorded on a  
medical information card held by the subject; and

a comparison step of comparing the pieces of  
15 identification information acquired in the first and  
second acquisition steps.

16. The method according to claim 15, wherein

the DNA microarray contains a second DNA probe  
group which can be used to test a specimen, and

20 the method further comprises a generation step of  
analyzing a pattern corresponding to the second DNA  
probe group from the hybridization pattern read in the  
reading step to generate test information.

17. The method according to claim 16, further

25 comprising a first recording step of, when it is  
determined as a result of comparison in the comparison  
step that the subject identified on the basis of the

first DNA probe group coincides with that recorded on the medical information card, recording the test information generated in the generation step on the medical information card.

5 18. The method according to claim 16, further comprising an output step of outputting a warning when it is determined as a result of comparison in the comparison step that the subject identified on the basis of the first DNA probe group does not coincide  
10 with that recorded on the medical information card.

19. The method according to claim 17, further comprising a second recording step of, when the identification information of the subject is not recorded on the medical information card, recording the  
15 identification information acquired in the first acquisition step on the medical information card.

20. A DNA microarray comprising:

a first DNA probe group which can be used to identify a subject; and

20 a second DNA probe group which can be used to test a health condition of the subject.

21. The microarray according to claim 20, wherein the first DNA probe group is constituted by probes corresponding to genes of major histocompatibility  
25 complex.

22. The microarray according to claim 20, further comprising a probe identification indicator to identify

a probe structure of at least one of the first and second DNA probe groups.

23. The microarray according to claim 20, further comprising an identification indicator that identifies  
5 the DNA microarray itself.

24. The apparatus according to claim 11, further comprising a reading inhibition unit configured to, when it is determined as a result of comparison by said comparison unit that the identification information of  
10 the subject from the first DNA probe group does not coincide with the identification information of the subject recorded on the medical information card, inhibit to read the hybridization pattern of the second DNA probe group.

15 25. The method according to claim 16, further comprising a reading inhibition step of, when it is determined as a result of comparison in the comparison step that the identification information of the subject from the first DNA probe group does not coincide with  
20 the identification information of the subject recorded on the medical information card, inhibiting a read of the hybridization pattern of the second DNA probe group.